

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A shrinkage disc unit, comprising:
 - a) a rotational body {2;4} comprising a circumferential outer surface {24;4d};
 - b) a hub {1} surrounding the rotational body {2;4} and comprising a circumferential inner surface {25} which together with the circumferential outer surface {24;4d} forms a joint {27} between the rotational body {2;4} and the hub {1} which is inclined with respect to a rotational axis {R} of the rotational body {2;4} in longitudinal sections of the shrinkage disc unit, wherein the hub {1} can be shrunk onto the rotational body {2;4} along the joint {27} or is shrunk on over the joint {27};
 - c) a fluid channel {11,12,13;16} leading through the rotational body {2;4} or the hub {1}, for charging the joint {27} with a pressurized fluid;
 - d) and a fixing structure {2a,5,6;4b,5,6} which is formed by one of the rotational body {2;4} and the hub {1}, alone or in combination with the other, and by means of which a tool {7,8;7,9} can be axially supported either on the rotational body {2;4} or the hub {1} and fixed in a predetermined rotational angular position on the rotational body {2;4} and/or the hub {1}, for assembling and/or disassembling the hub.
2. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 1,~~ characterized in that wherein the joint {27} is circumferentially-conical, at least in segments, preferably.
3. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~ characterized in that wherein a supporting collar {2f} is formed on either the rotational body {2;4} or the hub {1}, in order to support the tool {7,8;7,9} in a positive lock.
4. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~ characterized in that wherein a positioning element formed as a cavity or protrusion on either the rotational body {2;4} or the hub {1}, for a positioning element of the tool, formed as a protrusion {5} or cavity {6}, in order to position the tool {7,8;7,9} at an exact rotational angle.

5. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 4,~~
characterized ~~in that~~ wherein the positioning element (6) is arranged near to a port of the
fluid channel of the shrinkage disc unit, ~~preferably arranged in a rotational angular position~~
~~relative to the rotational axis~~ which is 30° at most away from the port of the fluid
channel.
6. (Currently Amended) A tool for assembling and/or disassembling the shrinkage disc unit
according to ~~one of the preceding claims 1,~~ said tool comprising:
- a) a fixing structure (7) for positioning the tool (7,8;7,9) on the rotational body (2;4) or
the hub (1) at an exact rotational angle and axially supporting the tool (7,8;7,9) on one
of the rotational body (2;4) and the hub (1);
 - b) a pressure element or tensile element, supported by the fixing structure (7) (8;9) such
that it can be moved, by means of which – when a fixing part (7) is axially supported on
one of the rotational body (2;4) and the hub (1) – the other of the rotational body (2;4)
and the hub (1) can be charged with an axial force;
 - c1) and a fluid channel (10a,10b;35a) formed in the tool (7,8;7,9) and – when the tool
(7,8;7,9) is fixed – connected to the fluid channel (10a,10b;35a) of the shrinkage disc
unit, such that the joint (27) can be charged with the pressurized fluid through the fluid
channel (10a,10b;35a) of the tool (7,8;7,9);
 - c2) or a sealing mechanism (19) formed by the tool (7,8;7,9), for sealing off the fluid
channel (16) of the shrinkage disc unit.
7. (Currently Amended) A combination of the shrinkage disc unit according to claim 1 and the
tool, [-] axially supported on the shrinkage disc unit and positioned at an exact rotational
angle, [-] according to claim 6.
8. (Currently Amended) A shrinkage disc unit including a separate tool, comprising:
- a) a conical circumferential outer surface (24) formed by a rotational body (2;4),
~~preferably a tensioning sleeve (2) with preferably a cylindrical inner surface (14) or a~~
~~shaft (4);~~
 - b) a hub (1) having a conical circumferential inner surface (25) which is pushed onto the
circumferential outer surface (24);
 - c) a tool for assembling and/or disassembling the shrinkage disc unit which is not a part of
the shrinkage disc unit;

~~characterized in that~~wherein:

- d) the tool is only connected to one of the rotational body {2;4} and the hub {1} in a non-positive and/or positive lock for assembling and/or disassembling the shrinkage disc unit;
- e) the joint {27} between the conical circumferential outer surface {24} and the conical circumferential inner surface {25} is charged with a pressurized fluid for assembling and disassembling the shrinkage disc unit, wherein this can only be achieved when the tool is properly fastened to said one of the rotational body {2;4} and the hub {1}.

9. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1, characterized in that~~wherein the tool comprises one or more protruding or retracted portions which engage with a corresponding number of portions of one of the rotational body {2;4} and the hub {1}, substantially congruent with respect to the portion or portions of the tool, when fastening the tool, wherein the configuration and arrangement of the portions only allows the tool to be fastened such that the tool and the shrinkage disc unit are guaranteed to function properly.

10. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1, characterized in that~~wherein the tool is forced to be properly fastened to one of the rotational body {2;4} and the hub {1} by the configuration of the tool and said one of the rotational body {2;4} and the hub {1}.

11. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1, characterized in that~~wherein the tool can be or is connected to one of the rotational body {2;4} and the hub {1} in a non-positive lock via a number of tensile screws {8}.

12. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1, characterized in that~~wherein the tool is connected to one of the rotational body {2;4} and the hub {1} in a positive lock via at least one groove {2a;4b} at least partially encircling an outer surface of said one of the rotational body {2;4} and the hub {1} and at least one portion of the tool engaging the at least one groove {2a} in a positive lock.

13. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~
characterized in that wherein the tool is connected to said one of the rotational body {2;4}
and the hub {1} in a frictional lock by surface contact.
14. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~
characterized in that wherein:
- a) the joint {27} is charged with pressurized fluid via a supply conduit {11,12,13;16} which
is integrated into one of the rotational body {2;4} and the hub {1} and via a supply
conduit {10a,10b} which is integrated into the tool.;
 - b) and wherein there is a connection between the supply conduits when the tool is properly
fastened to said one of the rotational body {2;4} and the hub {1}.
15. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 14,~~
characterized in that wherein:
- a) the joint {27} is charged with pressurized fluid via a supply conduit {11,12,13} which is
integrated into the shaft {4}, via a supply conduit {31,32} which is integrated into the
tensioning sleeve {2} and connected to the supply conduit {11,12,13} of the shaft {4},
and via a supply conduit {10A,10B} which is integrated into the tool;
 - b) and wherein there is a connection between the supply conduits when the tool is properly
fastened to the shaft {4}.
16. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~
characterized in that wherein the joint {27} is charged with pressurized fluid via a supply
conduit {11,12,13} which is integrated in said one of the rotational body {2;4} and the hub
{1} and via a supply conduit {35a} formed by a component of the tool, wherein the
component is connected indirectly or directly to a fixing structure {7} of the tool and the
supply conduit {35a} inserted in the component is preferably arranged substantially radially
with respect to the rotational axis.
17. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 16,~~
characterized in that wherein the supply conduit {35a} formed in the tool is formed by the
longitudinal bore of a screw-in lance {35} preferably via an outer thread {35d} into an inner
thread {7e} of an installation bore {7g} of the fixing structure and the longitudinal extension
of the installation bore is preferably substantially radial with respect to the rotational axis.

18. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 17,~~
characterized in that wherein the end of the screw-in lance (35) facing the rotational axis
comprises a conical trunnion (35e) which, once the tool has been attached to one of the
rotational body (2;4) and the hub (1), comes to rest on the congruent wall (36a) of a bore
(36) when the screw-in lance (35) is screwed into the installation bore (7g), ~~preferably the~~
~~bore (36) is a conical bore.~~
19. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 18,~~
characterized in that wherein the bore (36) of said one of the rotational body (2;4) and the
hub (1) is inserted substantially flush with the radial bore (11), and wherein there is a
connection to the radial bore (11).
20. (Currently Amended) The shrinkage disc unit according to ~~one of the two preceding claims~~
~~18, characterized in that~~ wherein the conical trunnion (35e) coming to rest on the wall (36a)
seals off the screw-in lance (35) from said one of the rotational body (2;4) and the hub (1),
preventing pressurized fluid from escaping into the surroundings of the shrinkage disc unit.
21. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~
characterized in that wherein a pressurized fluid supply conduit formed in the tool is formed
by the conduit channel (40a) of a tube (40).
22. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 21,~~
characterized in that wherein one end of the tube (40) is connected, permanently and
pressure-sealed, to a ~~preferably substantially spherical~~ an element (39).
23. (Currently Amended) The shrinkage disc unit according to claim 22, ~~characterized in~~
~~that~~ wherein the other end of the tube (40) ~~can be or is connected~~ indirectly or directly
connectable to a pressure port.
24. (Currently Amended) The shrinkage disc unit according to ~~one of the three preceding~~
~~claims 22, characterized in that~~ wherein the spherical element (39) surrounds the end of the
tube (40), wherein the opening of the conduit channel (40a) is not blocked.

25. (Currently Amended) The shrinkage disc unit according to ~~one of the four preceding~~ claims 22, characterized in that wherein the tube (40) ~~can be or is connected indirectly or directly connectable~~ to the fixing structure (7) of the tool, ~~wherein the longitudinal extension of the tube preferably runs along the centre axis of an installation bore (7g) which is preferably arranged substantially radially with respect to the centre axis of said one of the rotational body (2;4) and the hub (1), preferably the rotational body (2;4).~~
26. (Currently Amended) The shrinkage disc unit according to ~~one of the five preceding~~ claims 22, characterized in that wherein once the tool has been attached to said one of the rotational body (2;4) and the hub (1), the spherical element (39) comes to rest on the wall (36a) of a ~~preferably conical bore (36)~~, when a pressure piece (43) provided with an outer thread (43e) is screwed into the inner thread (7e) of the installation bore (7g).
27. (Currently Amended) The shrinkage disc unit according to ~~one of the six preceding~~ claims 22, characterized in that wherein the ~~preferably conical bore (36)~~ is inserted, substantially flush with the radial bore (11), into said one of the rotational body (2;4) and the hub (1), ~~preferably the rotational body~~, wherein there is a connection to the radial bore (11).
28. (Currently Amended) The shrinkage disc unit according to ~~one of the seven preceding~~ claims 22, characterized in that wherein the spherical element (39) coming to rest on the wall (36a) seals off the tube (40) from said one of the rotational body (2;4) and the hub (1), preventing pressurized fluid from escaping into the surroundings of the shrinkage disc unit.
29. (Currently Amended) The shrinkage disc unit according to ~~one of the eight preceding~~ claims 22, characterized in that wherein the pressure piece (43) is connected indirectly or directly to the spherical element (39).
30. (Currently Amended) The shrinkage disc unit according to ~~one of the nine preceding~~ claims 22, characterized in that wherein the pressure piece (43) is connected to the spherical element (39) via an axial spring element and via a pressure sleeve (41).

31. (Currently Amended) The shrinkage disc unit according to ~~the preceding claim 30,~~
characterized in that wherein the tube {40} is guided through a bore of the pressure sleeve {41}.
32. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~
characterized in that wherein when the shrinkage disc unit is assembled, the hub {1} is secured against axially shifting along the centre axis of the rotational body {2;4} in a positive lock on the rotational body {2;4} via a number of securing elements {29}, wherein the securing elements {29} are secured in their position on one of the rotational body {2;4} and the hub {1} in a non-positive lock or/and a positive lock.
33. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~
characterized in that wherein the tensioning sleeve {2} is prevented from axially shifting along the centre axis of the shaft {4} by the configuration of the tensioning sleeve {2} and the shaft {4}.
34. (Currently Amended) The tool according to claim 5, ~~characterized in that~~ wherein the fixing structure {7} is an annular body and bears a number of sub-assemblies {8;9} which apply the axial forces for assembling the shrinkage disc unit, and wherein the fixing structure {7} is embodied in one or more parts ~~and wherein at least one division is embodied radially with respect to the longitudinal axis of the fixing structure.~~
35. (Currently Amended) The tool according to ~~the preceding claim 34,~~ characterized in that wherein the sub-assemblies for applying the axial forces are embodied as fluid-operated duty cylinders or as screw elements or as wedge mechanisms or as lever mechanisms or as combinations of these, and wherein these sub-assemblies are connected indirectly or directly to the fixing structure {7}.
36. (Currently Amended) The tool according to ~~the preceding claim 35,~~ characterized in that wherein the sub-assemblies for applying the axial forces are embodied as hydraulic cylinders which consist substantially of cylindrical bores {26} comprising a pressure port {26a} and of pistons {9}, ~~wherein the cylindrical bores {26} are preferably worked directly into the fixing structure {7}.~~

37. (Currently Amended) The shrinkage disc unit according to ~~one of the preceding claims 1,~~
characterized in that wherein the circumferential outer surface ~~(24;4a)~~ and the
circumferential inner surface ~~(25)~~ comprise a number of congruent portions.
38. (New) The shrinkage disc unit according to claim 1, wherein the joint is
circumferentially conical.
39. (New) The shrinkage disc unit according to claim 5, wherein the positioning element is
arranged in a rotational angular position relative to the rotational axis which is 30° at most
away from the port of the fluid channel.
40. (New) The shrinkage disc unit according to claim 8, wherein the rotational body is a
tensioning sleeve.
41. (New) The shrinkage disc unit according to claim 11, wherein the tensioning sleeve has
a cylindrical inner surface or a shaft.
42. (New) The shrinkage disc unit according to claim 16, wherein the supply conduit
inserted in the component is arranged substantially radially with respect to the rotational
axis.
43. (New) The shrinkage disc unit according to claim 17, wherein the screw-in lance is
screwed via an outer thread into an inner thread of an installation bore of the fixing
structure.
44. (New) The shrinkage disc unit according to claim 43, wherein the longitudinal extension
of the installation bore is substantially radial with respect to the rotational axis.
45. (New) The shrinkage disc unit according to claim 18, wherein the bore is a conical bore.
46. (New) The shrinkage disc unit according to claim 22, wherein the element is
substantially spherical.

- 47.(New) The shrinkage disc unit according to claim 25, wherein the longitudinal extension of the tube runs along the centre axis of an installation bore.
- 48.(New) The shrinkage disc unit according to claim 47, wherein the installation bore is arranged substantially radially with respect to the centre axis of said one of the rotational body and the hub.
- 49.(New) The shrinkage disc unit according to claim 47, wherein the installation bore is arranged substantially radially with respect to the centre axis of the rotational body.
- 50.(New) The shrinkage disc unit according to claim 26, wherein the bore is a conical bore.
- 51.(New) The shrinkage disc unit according to claim 27, wherein the bore is a conical bore.
- 52.(New) The shrinkage disc unit according to claim 51, wherein the bore is inserted into the rotational body.
- 53.(New) The tool according to claim 34, wherein the at least one division is embodied radially with respect to the longitudinal axis of the fixing structure.
- 54.(New) The tool according to claim 36, wherein the cylindrical bores are worked directly into the fixing structure.